COMFILE TECHNOLOGY

Safety Precautions 1

Overview and Specifications 2

Component Description 3

Wiring and Control 4

RH8 Relay Board

8-Channel Relay Board
RH8 Relay Board User Manual

User Manual

Version 1.1
COMFILE TECHNOLOGY

Contents

SAFETY PRECAUTIONS 1 3

1.1 WARNING AND CAUTION 3

1.2 WARNINGS 3

1.3 CAUTIONS 4

OVERVIEW AND SPECIFICATIONS 2 5

2.1 PRODUCT OVERVIEW 5

2.2 GENERAL SPECIFICATIONS 5

2.3 COIL SPECIFICATIONS 6

2.4 CONTACT SPECIFICATIONS 6

COMPONENT DESCRIPTION 3 7

WIRING AND CONTROL 4 8

Safety Precautions 1

Thank you for purchasing this COMFILE Technology product. Read the safety precautions carefully before use.

1.1 Warning and Caution

Follow these precautions to use the product safely and correctly and prevent accidents or hazards. The precautions are classified as Warnings and Cautions.

Warning: Failure to follow these instructions may result in serious injury or death.

Caution: Failure to follow these instructions may result in minor injury or damage to the product.

The triangle with an exclamation mark on the product and in this manual indicates a potential hazard under certain conditions.

1.2 Warnings

1. When using this product to control equipment that could seriously affect life or property (such as nuclear control systems, medical equipment, vehicles, railways, aircraft, combustion equipment, amusement equipment, or safety devices), install redundant safety devices. Failure to do so may result in fire, injury, loss of life, or property damage.

2. Mount the product in a panel before use. Failure to do so may result in electric shock.

3. Do not wire, inspect, or service the product while power is applied. Electric shock may result.

4. Only COMFILE service technicians may modify the product. Unauthorized modification may result in electric shock.

5. Check the terminal numbers before connecting the power supply or measurement inputs. Incorrect connections may cause a fire.

1.3 Cautions

1. Do not use outdoors. Outdoor use may shorten the service life and cause electric shock.

2. Use only within the specified ratings and performance limits. Exceeding them may shorten the service life and cause a fire.

3. Do not connect loads that exceed the rated switching capacity of the relay contacts.

4. Do not use in locations exposed to flammable or explosive gases, moisture, direct sunlight, radiant heat, vibration, or impact.

5. Keep dust and wire scraps out of the product.

6. Check the polarity of the measurement terminals and connect the wiring correctly.

7. COMFILE Technology assumes no legal liability or liability for damages under any circumstances. Thoroughly review and test the product before installing and using it on site.

Overview and Specifications

2

2.1 Product Overview

This expansion board has eight high-capacity (10 A) relays and connects to a control board. A simple cable connection allows use with CT1820, CT1721C, and MSB7XX series products. It is suitable for reliable control of high-capacity equipment.



2.2 General Specifications

Item	Specification
Number of contacts	8
Control method	Sinking output
Operate time	15 ms max. at rated voltage
Release time	5 ms max. at rated voltage
Operating conditions	Temperature: -30°C to 70°C Humidity: 45% to 80% RH

2.3 Coil Specifications

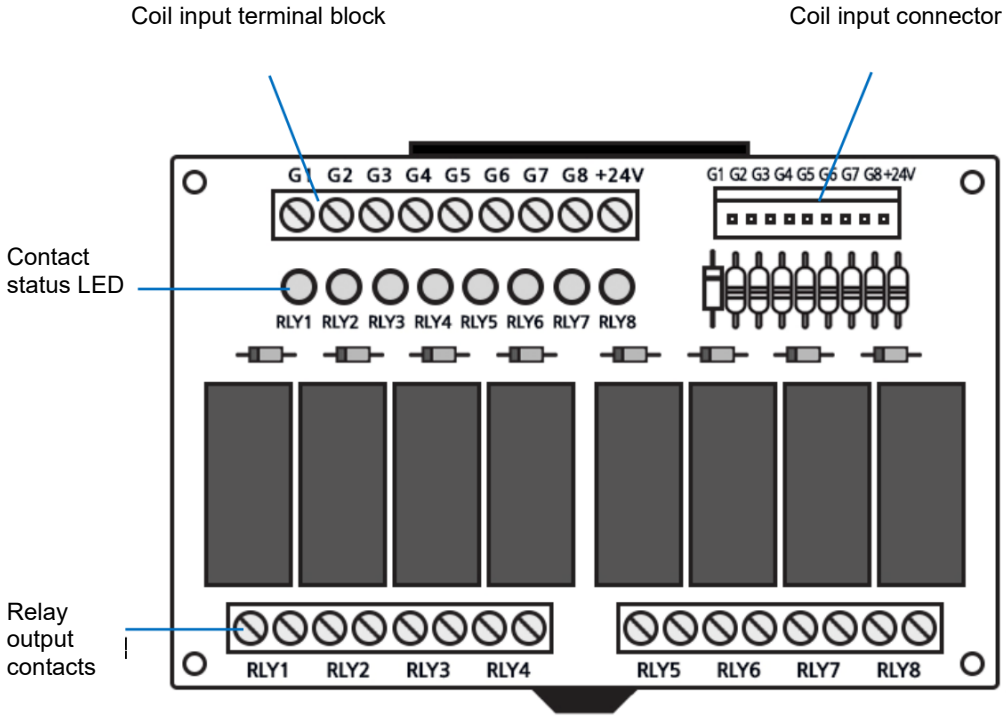
Item	Specification
Rated input voltage	24 VDC
Rated input current	22.1 mA per contact
Minimum operating voltage	18 VDC
Rated power	530 mW per contact

2.4 Contact Specifications

Item	Specification
Maximum carry current	10 A
Rated current	10 A at 30 VDC 10 A at 250 VAC
Initial contact resistance	100 mΩ
Maximum switching capacity	DC: 300 W AC: 2,500 VA
Maximum switching voltage	110 VDC 250 VAC

Component Description

3



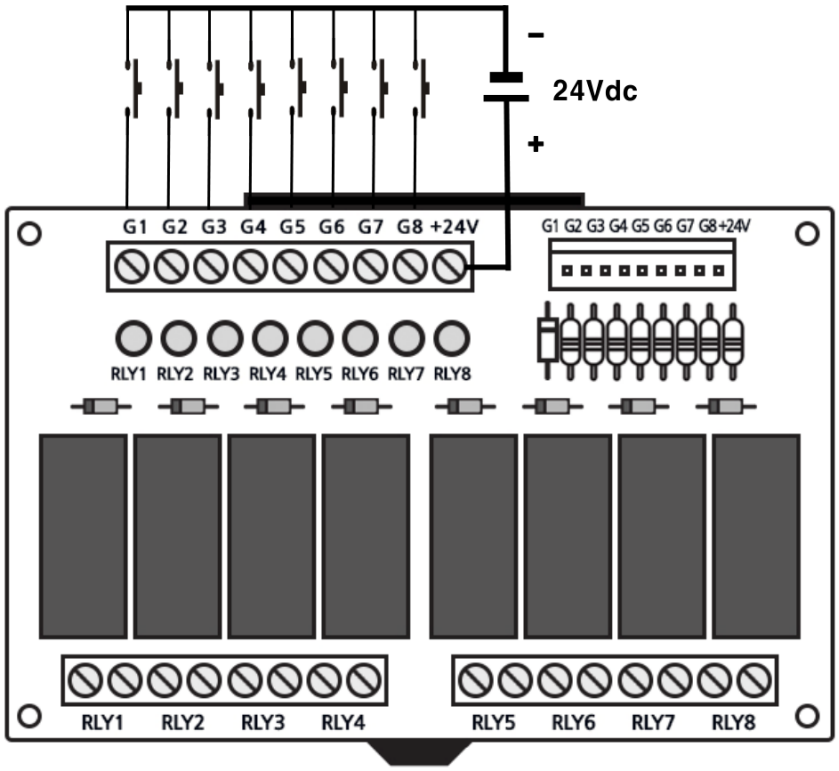
The coil input terminal block and coil input connector are electrically connected in parallel.

Wiring and Control

4

The RH8 Relay Board uses sinking outputs to control the relays, with the positive side (24 VDC) connected in common. To turn on a relay contact, apply 24 VDC to the +24V terminal and connect the corresponding input (G1, G2, G3, etc.) to the negative supply terminal.

With a sinking output, one side of the load remains connected to the positive supply, while the other side is switched to the negative supply when the output turns on.



Note: An input connector cable is included with the product.